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ABSTRACT

The purpose of this paper is to provide guidance for instructional sequencing in emotional literacy curricula. First, the concepts of instructional sequence and the problems involved with instructional sequence in the affective domain of learning are addressed. Then, through the analysis of the emotional literacy curriculum, Promoting Alternative Thinking Strategies (PATHS) as an exemplary case, general principles are inferred for instructional sequencing in emotional literacy learning. From these, principles for micro-level (within-lesson) sequencing and macro-level (curriculum) sequencing are derived. Factors influencing these sequencing principles are discussed. Six figures outline the following: (1) definitions of the dimensions of affective development (from Martin & Reigeluth, 1999); (2) a conceptual model for affective development (from Martin & Reigheluth, 1999); (3) seven steps of a lesson and the script; (4) micro-level sequencing strategies in PATHS; (5) genera of feelings and relationships in the PATHS; and (6) macro-level sequencing. (Contains 15 references.) (Author/AEF)

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Guidelines for Instructional Sequencing in Emotional Literacy Learning-Using PATHS Curriculum as an Example

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Abstract

The purpose of this paper is to provide guidance for instructional sequencing in emotional literacy curricula. First, the concepts of instructional sequence and the problems involved with instructional sequence in affective domain of learning are addressed. Then, through the analysis of the emotional literacy curriculum Promoting Alternative Thinking Strategies (PATHS) as an exemplary case, general principles are inferred for instructional sequencing in emotional literacy learning. From these, principles for micro-level (within-lesson) sequencing and macro-level (curriculum) sequencing are derived. Factors influencing these sequencing principles are discussed.

1. Introduction

Within the wide range of opinions on the best way to categorize types of learning, Bloom's (1956) categorization of learning into three domains--cognitive, affective, and psychomotor- is the most widely accepted. The cognitive domain of learning "deals with the recall or recognition of knowledge and the development of understandings and intellectual abilities and skills" (Reigeluth & Moore, 1999, p. 52). The affective domain of learning "refers to components of affective development focusing on internal changes or processes, or to categories of behavior within affective education as a process or end-product" (Martin & Reigeluth, 1999, p. 486). The psychomotor domain of learning "involves athletic, manual, and other such physical skills" (Heinich, Molenda, & Russell, 1993, p. 41). Scholars, researchers, and practitioners in the educational fields have been endeavoring to design and develop curricula and instructional methods that will promote effective and efficient learning. Among these three domains of learning, cognitive learning and psychomotor learning have, up until now, received the most scholarly attention and benefited from the greatest and most sophisticated efforts in design, development, and practice. Meanwhile, comparatively little progress has been made toward designing and developing curricula and instructional methods in affective learning (Beane, 1990). Among the major reasons for this state of affairs are the currently uncertain and unclear notions of the proper definition and scope of affective learning, and a prevailing over-general approach that makes it more difficult to undertake scholarly research in this area (Bills, 1976; Beane, 1990). As a result, the affective curriculum does not fully encompass the scope of the affective domain of learning, but often emphasizes the teaching of only certain dimensions (such as the "moral"), while paying little overt attention to other dimensions (such as the "emotional").

In order to better design and develop curricula and instructional methods in the affective domain of learning, Martin & Reigeluth (1999) divide it into six dimensions: emotional development, moral development, social development, spiritual development, aesthetic development, and motivational development. Each of these six dimensions is associated with its own unique components of instructional value, such as knowledge, skills, attitudes, etc. (Definitions and associated components for each dimension are tabulated in figure 1 and figure 2.) Clearly, the fact that each of these dimensions has its own unique criteria for consideration in instructional sequencing and instructional methods poses difficulties for anyone who wishes to design instructional strategies for use within the affective learning domain. Because of space limitations, I will restrict my discussion of the reasons for this state of affairs to the latter part of this paper. The major focus of this paper will be on the question of sequencing in the development of emotional learning. This topic is very seldom discussed. However, with the recognized importance of emotional education in present day society (Goleman, 1995), there exists an urgent need to design and develop emotional literacy learning soon, so that educational methods to develop an emotionally-mature personality can be implemented starting at the early stages of childhood.

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Term	Definition
Emotional Development	Understanding your own and others' feelings and affective evaluation, learning to manage those feelings, and wanting to do so.
Moral Development	Building codes of behavior and rationales for following them, including developing prosocial attitudes, often in relation to caring, justice, equality, etc.
Social Development	Building skills and attitudes for initiating and establishing interactions and maintaining relationships with others, including peers, family, coworkers, and those different form ours.
Spiritual Development	Cultivating an awareness and appreciation of one's soul and its connection with others' souls, with God, and with all His Creation.
Aesthetic Development	Acquiring an appreciation for beauty and style, including the ability to recognize and create it; commonly linked to art and music, but also includes the aesthetics if ideas.
Motivational Development	Cultivating interests and the desire to cultivate interests, based on the joy or utility they provide, including both vocational and avocational pursuits.

Fig. 1. Definitions of the dimensions of affective development (from Martin & Reigeluth, 1999, p. 494)

	COMPONENTS OF INSTRUCTIONAL VALUE			
DIMENSIONS	***Knowledge***	***Skills***	***Attitudes***	***Others?***
Emotional Development	Knowing that others experience the same emotions you do, such as joy and anger	Recognizing emotions Controlling one's emotions	I want to be happy. I don't like to be angry.	?
Moral Development	Understanding moral & ethical rules of the culture, such as caring, justice, equality	Moral reasoning skills Problem-solving skills in the realm of morals	I want to be honest. I am in favor of having ethical standards.	?
Social Development	Understanding group dynamics and democratic ideas, such as the role of a facilitator	Social skills, including interpersonal communication skills	I want to interact positively with others. I am opposed to resolving disagreements by fighting.	?
Spiritual Development	Knowledge of religious precepts about the spiritual world, such as the nature of the soul	Skills for getting in touch with your inner self Ability to love others selflessly	I want a spiritual life. I am in favor of prayer to build a relationship with God.	?
Aesthetic Development	Understanding the subjective nature of aesthetics, such as the relationship between one's values and one's judgement	Skills for assessing aesthetic qualities Skills for generating aesthetic creations	I want to surround myself with things of beauty. I appreciate an elegant theory.	?
Motivational Development	Understanding internal and external rewards for sustained activity, such as joy and sense of accomplishment	Skills for developing one's interests, both immediate and life-long	I want a career that I enjoy. I am opposed to hobbies related to guns.	?

Fig. 2. A conceptual model for affective development (from Martin & Reigeluth, 1999, p. 493)

The paper will begin with a discussion of the concept of "sequencing" as it applies to curriculum development. It will then proceed to a more detailed discussion of sequencing strategies in the emotional

literacy curriculum. In order to arrive at suggested guidelines for sequencing strategies for the emotional literacy curriculum, I will use PATHS, an emotional literacy curriculum program, as an exemplary case for analysis. After the analysis and discussion of PATHS, as well as of other literature in emotional development, I will synthesize a set of guidelines for emotional learning sequencing strategies, and explore their further implications for the design and development of emotional learning.

2.1. "Sequencing" in Curriculum and Instruction

There are several crucial decisions to make when designing and developing valid, worth-while curricula and instructional methods. These decisions include selecting educational objectives, selecting learning experiences, organizing learning experiences, and evaluating learning experiences (Tyler, 1949). Tyler goes on to cite three basic guiding criteria to be applied in the organization of learning experiences. These are: continuity, sequence, and integration. "Continuity refers to the vertical reiteration of major curriculum elements" (p. 84); "[s]equence . . . emphasizes the importance of having each successive experience build upon the preceding one but to go more broadly and deeply into the matters involved" (p. 85); "[i]ntegration refers to the horizontal relationship of curriculum experiences" (p. 85). While Tyler views these criteria as sufficient for the building of an effective scheme of organization for learning experiences, he did not provide many further guidelines for "sequencing" in subsequent discussions. Yet this aspect of learning, referring as it does to the "increasing breadth and depth of the learner's development" (p. 96), is undeniably of central importance in practical curriculum design.

According to Reigeluth (in press), "sequence," in brief, deals with "how to group and order the content." And the main factors which govern this grouping and ordering lie in the "relationships" within the content. Up to the present, there are four most popular sequencing strategies in instructional design, each is only concerned with a single type of relationship within the content. They are chronological sequence, procedural sequence, hierarchical sequence and simplifying conditions sequence. "A chronological sequence is based on the temporal order of events" (Leshin, Pollock & Reigeluth, 1992, p. 81). "A procedural sequence, ... is based upon the relationship of 'order of performance' of the steps in the procedure. A hierarchical sequence is based upon the relationship of learning prerequisites among the various skills and subskills that comprise a task. And the 'simplifying conditions' sequence is based upon the relationship of the degree of complexity of different versions of a complex task" (Reigeluth, in press).

2.2. Sequencing Strategies in Affective Learning

One thing that should be mentioned here is that these sequencing strategies are customarily applied to only two of the three domains of learning: cognitive and psychomotor learning. Sequencing strategies pertinent to affective learning have been neglected. Few researchers and writers have been willing to tackle them. Even the landmark treatise touching on affective learning, ***The Affective and Cognitive Domains: Integration for Instruction and Research***, by Martin and Briggs (1986), does not fully address "sequence" nor does it shed light on the principles and guidelines for sequencing in affective learning. However, this does not mean that "sequence" in affective learning is unimportant. On the contrary, this has been the focus of growing attention in very recent years, concerned with an increased acknowledgment of the importance of affective learning. For example, Dr. Charles M. Reigeluth in the field of instructional systems technology has been endeavoring to find valid, proven guidance for making decisions about sequencing in affective learning, with a special focus on emotional literacy learning. It is also under his encouragement and direction that the author is devoting research to this topic. The author may seem rash in making such a commitment--assuming a burden which others have thus far been reluctant to take on. There must be thorny issues in the process, so the mystery of sequencing in affective learning has not been explored. What, then, are the problem(s) or "issues" encountered in this domain?

Because of the incompleteness of the body of literature and research directly investigating the patterns of sequencing in this domain, the author undertook an analysis of an emotional literacy curriculum, ***PATHS (Promoting Alternative THinking Strategies)***, in order to infer a set of pragmatic guidelines for sequencing, and factors for influencing the sequencing. Hopefully, this data can begin to provide principles and guidelines in sequencing strategies for further design and development on affective education.

3.1. Emotional Development

"Emotional development" in short, is "Understanding [how to] control one's feelings, and learning to manage one's emotions" (Martin & Reigeluth, 1999). As stated previously, this dimension of the affective domain of learning already exists as a hidden curriculum, and has been taught implicitly.

Unfortunately this minimal curriculum design paradigm has proven incapable of meeting the demands posed by the mass of family and societal problems caused by emotional disequilibrium. The high degree of serious emotional disequilibrium in today's families and societies is surely, to some extent, a reflection of the large quantity of sad and violent crime events, emotional ineptitude, emotional abuse, desperation, and recklessness reported in any day's newspaper (Goleman, 1995). In such an environment, children are and will be the victims. As Daniel Goleman (1995), a Harvard psychologist, states, "[a] massive survey or parents and teachers shows a worldwide trend for the present generation of children to be more troubled than the last: more lonely and depressed, more angry and unruly, more nervous and prone to worry, more impulsive and aggressive" (p. xiii).

This emotional crisis has been expounded rather clearly in Goleman's popular treatise, ***Emotional Intelligence: why it can matter more than IQ*** (1995). This book, which bases its conclusions on studies of the brain's structure and function, and draws on the related fields of physiology, neurology, psychology and behavior, etc., has revealed much about how the human "emotional mind" functions and its significance in directing human behavior throughout life. Goleman points out that the factors which lead to success in life and career involve not only the Intelligence Quotient (IQ) but also a more dominant index: the Emotional Quotient (EQ). Goleman states that the emotional quotient represents self-awareness and impulse control, persistence, zeal and self-motivation, empathy and social deftness. He further indicates that an individual with higher emotional intelligence tends to have better opportunities and greater success in any field.

Research has shown that emotional development occurs ahead of cognitive development (Greenberg & Kusché, 1993). It is further suggested that EQ is not genetically determined, but can be nurtured and strengthened for years after birth by emotional literacy programs designed to enhance emotional intelligence. Goleman urged that our schools should have emotional curricula to prepare our young for successful life. He outlined several vital curricula on emotional literacy for elementary students, designed to direct them to manage their feelings and solve daily interpersonal conflicts. Among these the one most suitable for my project, and hence chosen here as a case for study, is the PATHS curriculum, developed by Greenberg, Kusché, and associates.

3.2. The PATHS Curriculum

The Purpose of PATHS

"The purposes of The PATHS Curriculum are to enhance social and emotional competence and understanding in children, as well as to develop a caring, prosocial context that facilitates educational processes in the classroom (The PATHS instructional manual, p. 1)". This is an experimental-based program initially designed for deaf children. The original title is called ***Promoting Social and Emotional Development in Deaf Children: The PATHS Project*** (Greenberg & Kusché, 1993). Since 1982 this program has been revised and expanded to meet the needs of different types of children and of multi-culture. This program is designed for kindergarten through 6. It can not only serves as a intervention program for children with physical or mental or cognitively delayed or severe behavioral disturbance or emotional problems, but also can serve as a prevention program for normal or regular or even gifted children. And this program has been successfully applied in all above different types of children.

PATHS can be effective as both a prevention and as an intervention program (Greenberg & Kusché, 1993). "These dual functions are especially of practical value to educators, since today's classrooms generally include a mixture of children who are in need of intervention as well as children who are not: at risk," but who can nevertheless benefit from prevention programs designed to reinforce healthy functioning. We have found PATHS to be useful with a variety types of children" (The PATHS instructional manual, p. 2).

Theoretical Roots

The design of PATHS takes into account aspects of diverse theories of human behavior and development. According to the authors, these theories include developmental social cognition (e.g., Greenspan [1981] and Shantz [1983]), cognitive developmental theory (e.g., Dewey [1894, 1933] and Piaget [1981]), psychoanalytic developmental psychology (e.g., Freud [1981], Nagera [1966], Pine [1985]), and attachment theory (e.g., Bowlby [1973, 1982]), interpersonal development (e.g., Selman [1980]), interpersonal problem solving (Spivak, Platt & Shure [1976]), moral development (e.g., Kohlberg [1980]), cognitive-social learning (e.g., Bandura [1986]), cognitive-behavior therapy (e.g., Kendall & Braswell [1985], Meichenbaum [1977]), Bretherton [1985], Main et al. [1985]), and so on (Greenberg & Kushé, 1993).

These above research studies have been integrated into the so-called Affective-Behavior-Cognitive-Dynamic (ABCD) theoretical model of development, which forms the foundation PATHS. The ABCD model emphasizes the dynamic relationship among affect, behavior, and cognition, integrating these three aspects so as to facilitate children's positive and healthy personality development and social functioning throughout their different developmental phases (Greenberg & Kusché, 1993).

Learning Goals

PATHS addresses the following goals in the areas of social and emotional development:

1. Increased self-control.
2. Enhanced self-esteem, self-confidence, and the ability to give and receive compliments.
3. Increased understanding and use of the vocabulary of emotions, verbal mediation, dialoguing, and interpersonal communication.
4. Improved ability to recognize and interpret the differences between feelings, behaviors, and perspectives of self and others.
5. Understanding of attributional processes that lead to an appropriate sense of self-responsibility.
6. Recognition and understanding of how one's behaviors affect others.
7. Enhanced motivation and use of creativity.
8. Increase understanding and use of logical reasoning and problem-solving vocabulary.
9. Improved knowledge of, and skill in, the steps of social problem-solving: leading to the prevention and/or resolution of problems and conflicts in daily life.

(The PATHS Instructional manual, p. 2)

These nine goals are designed to develop the child's self-control, positive self-esteem, emotional awareness and management, and interpersonal problem-solving skills. They are quite inclusive, and are consistent with the essential components of the current dominant conceptual models or frameworks for emotional intelligence. PATHS comprises one hundred and thirty-one lessons, each lesson taking about 20-30 minutes of classroom time. These lessons are classified into four major units: readiness and self-control (1 volume), feelings and relationships (3 volumes), problem-solving (1 volume), and supplementary lessons (1 volume). These units deal with five major conceptual domains: self-control, emotional understanding, building self esteem, relationships, and interpersonal problem-solving skills.

Philosophy Underlying the Goals

The philosophy intrinsic to PATHS reflects the authors' belief in educating the whole child, which is compatible with John Dewey's philosophy of wholistic education (The PATHS Instructional manual, p. 8). The wholistic approach to education entails treating language, cognition, memory, emotion, and behavior as intimately interrelated and all-important aspects of every child's personality. In accord with this philosophy, the authors affirm that

> Emotions affect all of us on a daily basis throughout our lives. Understanding and dealing with our feelings and those of others are therefore areas that will be of continual concern to all of us, whether or not we are aware of this. Understanding emotions often becomes more complex as we get older. Further, sharing emotional issues with others continues to be at least one of the major motivations for social interaction and is often the "glue" for intimacy and friendship (Youniss, 1980; Selman, 1980)." (Instructional Manual, p. 125)

Unfortunately, traditional education has emphasized the acquisition of cognitive skills much more than that of aspects of emotional cultivation, such as emotional awareness, emotional control, and so on. Thus, children have never been taught through a systematic emotional development curriculum, and teachers, more familiar with instructional methods in cognitive learning than with those for emotional learning, have less confidence in teaching emotional learning. Since PATHS provides a complete curriculum and more than one hundred lesson plans on emotional literacy for elementary school, it may offer elementary teachers a new level of confidence and comfort in thinking about wholistic education and teaching in a wholistic way.

Instructional Methods

PATHS is intended to be a separate course within the general curriculum, and is suited to the k-6 elementary years. It employs a variety of instructional methods. Because it concentrates, not on teaching cognitive skills, but rather on cultivating affect, it combines a variety of instructional methods so as to promote progressive emotional and behavioral change in the individual. These instructional methods include dialoguing, role-playing, story-telling, simulation, modeling, social and self-reinforcement,

attribution training, and verbal mediation. Visual, verbal, and kinesthetic modalities are combined to promote learning. These instructional methods are mostly intended to be conducted by the teachers; however, parents are also expected to participate in modeling outside the school environment.

The Significance of PATHS

The PATHS program has achieved improvements in several areas of children's learning. Goleman notes (1995, p. 306), that the PATHS curriculum has been successful in the following areas:

- Improvement in social cognitive skills
- Improvement in emotion, recognition, and understanding
- Better self-control
- Better planning for solving cognitive tasks
- More thinking before acting
- More effective conflict resolution
- More positive classroom atmosphere

For the purpose of this project, only the **Feelings and Relationships Unit** is included for investigation because it represents the major portion and thrust in emotional literacy.

4.1. Micro-Level (Within-Lesson) Sequencing Strategies in PATHS

Basically, the pattern of sequencing within each lesson of the Feelings and Relationships Unit follows seven steps set out by the developers of PATHS (PATHS, v. 1, p. xxix). Figure 3 shows these seven steps (PATHS, v. 1, p. xxix), as well as an example of the script of a lesson on HAPPY (PATHS, v. 1, pp. 43-44).

Step of a Lesson	Script of a Lesson on HAPPY
1. Presenting a given emotion with a simple definition.	Happy is the way we feel when we are glad about something or when we enjoy something.
2. Showing pictures of the emotional expression.	(Take the Happy Feeling Face out of the Feelings Chart and show it to the class.) This Felling Face shows someone who is feeling happy. Do you think that happy feels comfortable or uncomfortable inside?
3. Providing examples of situations that typically elicit the feeling.	We can feel happy for a lot of reasons. There are lots of times we feel happy, like if we get to go some place we really like, if we get to play with our friends, if we get something really special, and so on.
4. Having the children talk about times when they have experienced the emotion.	Can anyone think of a time when they felt happy?
5. Modeling and labeling the feeling as a group.	Now let's look at two photographs of people who feel happy. (Point out the features that indicate happiness...Model as needed for further clarification or demonstration.)
6. Having the children make "Feeling Faces".	Now let's all practice the word HAPPY together. I want all of you to think about how you feel when you feel happy. Try to make your body feel happy and make your face look happy. Try to feel happy inside.
7. Providing the children with an activity through which the emotion can be experienced on a more personal level.	Then, while you are feeling happy, I want all of you to say the word HAPPY together. Then we will all spell it together. Then we will say it and spell it again. After that, we will say the sentence "I feel happy" together. If you need to remember how to spell the word happy, look up at the Feelings Chart or the board (or overhead) where I have written the word. Is everybody ready? Good. Let's all look and feel HAPPY and practice the word together.

Fig. 3. Seven steps of a lesson and the script.

At first glance, the seven steps of PATHS may seem superficial and oversimplified. However, by deeply pondering on these seven steps, it is apparent that they show an interesting model of sequencing of content in emotional literacy. The seven steps are converted to the following analysis (see Figure 4):

Step of Sequencing Strategies	Domain of Learning	Guideline of Sequencing Strategies

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1. Presenting a given emotion with a simple definition. 2. Showing pictures of the emotional expression. 3. Providing examples of situations that typically elicit the feeling. 4. Having the children talk about times when they have experienced the emotion. 5. Modeling and labeling the feeling as a group. 6. Having the children make "Feeling Faces". 7. Providing the children with an activity through which the emotion can be experienced on a more personal level.	1. Concept generalization. (Cognitive) 2. Concept classification. (Cognitive) 3. Principle learning. (Cognitive) 4. Cognitive & emotional. 5. Cognitive & emotional. 6. Behavioral. 7. Emotional & empathy.	Cognitive-to-Behavior-to-Affective External-to-Internal

Fig. 4. Micro-level sequencing strategies in PATHS.

Step 1 gives a definition of one kind of emotion which seems to deal with the **concept generalization**. Pictures of facial expressions shown in step 2 depict the **concept classification**. Therefore, both these first two steps are aimed at the cognitive aspect of learning, which strives to recognize, understand and even discriminate between and among the concepts of certain feelings. In step 3, kinds of situations eliciting the feelings are shown to point out that there is a cause and effect relationship between the two. This is dealing with **principle learning**. Each of these three steps is concerned primarily with the cognitive domain of learning, which "deal[s] with the recall or recognition of knowledge and the development of understandings and intellectual abilities and skills" (Reigeluth & Moore, 1999. P. 52).

In step 4, the learners must talk about times when they have experienced the feelings already conceptualized and situated (by example). The learner is called upon to reach into his/her personal feelings and connect these concepts and practices to the actual, felt emotion. Although this is still cognitive-oriented, it goes to a deeper **emotional level of learning**.

In step 5, modeling and labeling the feelings enables learners to recognize the feeling through a cognitive-based approach. This combines the **cognitive and affective components**. In step 6, having the children make "Feeling Faces" entails asking the learners to exhibit the emotions as if they actually were feeling them. They are asked to show these feelings by their facial expressions, and further, they are asked to imagine the feelings as they do this. This requires them to emphasize the feeling **beyond the cognitive-based learning**. This combines the **behavioral and affective components (a sense of empathy)**. Step 7 deals with a specific individual situation for feedback on how each learner would react emotionally. An example would be to ask "How would you feel if your money were stolen?" This level asks the learners to internalize the situation and to simulate their own **emotional reaction**. This brings to awareness as closely as possible the feelings available to each of the learners.

In conclusion, in analyzing the seven steps of sequencing within a lesson, it becomes apparent that the within-lesson sequence is mainly structured so as to proceed from cognitive to behavioral to affective, and from external to internal through recognition, reflection and ultimately to the empathetic--(emotional)--state which is feeling. These sequencing strategies are synthesized in figure 4.

4.2. Factors Affecting Within-Lesson Sequencing Strategies in PATHS

The author has been endeavoring to uncover the rationale, or theoretical roots, embedded within the practice of the within-the-lesson sequencing strategies shown above. It has been found that the arrangement of within-lesson sequencing strategies is consistent with the following rationale and practice:

According to Kusché, Between ages five and seven, there are several changes in emotional development, including:

- the spontaneous generation of emotional concepts

- identification of anger
- understanding cause-effect relationships
- emotional perspective-taking
- recognition of emotional facial expressions
- internal-external generation of emotional concepts.

(Personal communication, November 1997)

Therefore, these steps in developmental readiness correspond to these sequencing strategies. Most of these seven steps of sequencing strategies are designed to correspond with developmental readiness. During this developmental stage, language is also believed to provide three ways to facilitate the child's behavioral and emotional control (Greenberg & Kusché, 1993, p. 77):

> "First, it serves to communicate one's internal states to others... Second, language provides an internal executive function that can mediate between impulse and behavioral action... Finally, language, and possibly other forms of symbolic representation, allow the child to become consciously aware of his or her feelings."

One method of facilitating a child's verbal and emotional control is verbal labeling of emotional states, which help the child develop powerful, new forms of self-control and self-expression.

Also between the ages of five and seven, the child's teacher, parents, and other adults play very important parts as role models, demonstrating ways of using cognitive and affective processes for managing frustration, maintaining control during times of emotional turmoil, and dealing with interpersonal conflict. This would benefit the child's emotional development and social competence.

5.1. Macro-Level Sequencing in PATHS

Macro-level sequencing analysis deals with how all the topics to be taught in the entire curriculum (i.e., here, the Feelings and Relationships Unit of PATHS) ought to be sequenced. Since the entire unit covers fifty-six lessons of several topics, it is not easy at the beginning to figure out thoroughly all kinds of sequencing to be applied, especially in an implicit way. Therefore, the author begins with the analysis of the sequencing patterns in the unit, to see if they follow in a topical or a spiral sequence. This is not an easy task because the connotations of the families of emotional feeling words are controversial, especially those which pertain to more complex feelings. Several schools of research on emotion have already created families of classifications. These share some similarities, but the differences have created some considerable controversy (Goleman, 1995). This may produce various interpretations of the sequencing at the macro-level content. Unfortunately, the developers of PATHS do not fully elaborate on the classification of families of emotions, but simply separate all feeling words into "comfortable" and "uncomfortable" feelings for the convenience of children to relate to them. Therefore, the author of this paper had to delineate less generally to achieve a more complete classification of words.

To begin classification, the author first reviewed the content of each PATHS lesson carefully to understand the meaning of the feeling words in the context of the lessons. This process helped the author to arrive at a more distinct classification of many of the words. However, the remaining words were fuzzy in personal interpretation, vague, and complex in nature. Therefore, to achieve a better approach, the author has consulted subject matter experts and academic research materials on emotions (Goleman, 1995; Ortony, Clore & Collins, 1988, p. 27). Finally, a classification figure was produced: Genera of Feelings & Relationships in PATHS (see Figure 5.). Because the Feelings and Relationships Unit covers not only feeling words but also other activities involving behavior management in the domain of emotional literacy, the classification figure extends beyond feeling words. This classification helped the author name the topic of each lesson. This made it easier for later analysis of the sequencing pattern to which lessons pertain.

Feeling	A general introduction to emotional state
Enjoyment	Happy, delighted, proud, content, satisfied
Sadness	Sad, a little down, depressed, (disappointed, hopeful), lonely
Private	Private, privacy, hiding feelings
Fine	(Fine, excited, tired)
Anger	Angry, mad, grouchy, grumpy, furious, frustrated, resentful, anger management
Fear	Afraid, (scared, safe), uneasy, terrified, nervous, (anxious, calm or relaxed)

Surprise	(surprised, expect)
Love	(Love, hate), (like, don't like), (kind, malicious), (included, rejected, excluded), generous, forgiving.
Disgust	Disgusted
Shame	Ashamed, guilty, shy, embarrassed, humiliated
Interest	(Curious, interested, bored)
Confused	(Confused, worried, sure)
Observation	Observing emotional clues in other people, observing emotional clues in ourselves
Intentionality	(Accident, on purpose)
Manner	Manner
Change Feeling	Change feeling
Jealous	Jealous or envious
Selfish	Greedy, selfish
Note: ( ) denotes antonymous feelings	

Fig. 5. Genera of Feelings & Relationships in the PATHS.

The author then planed the order of each lesson to figure out the flow of the ordering of the topics. From this, a flowchart of lesson ordering was produced (see Figure 7). The flowchart illustrates several findings that are unique in this field of knowledge and will enhance further analysis of the deeper, implicit, and more complex relationships in sequencing. Later parts will have more elaboration.

5.1.1. A spiral/topical curriculum

In the flowchart, it shows that the patterns of sequencing of the topics to be taught tend to be a combination of two popular types of curriculum sequencing: spiral and topical sequencing. In topical sequencing, the "topic (or task) is taught to whatever depth of understanding (or competence) is required, before moving to the next one." (Reigeluth, 1992, p. 2.6) In spiral sequencing, several passes over the material are used to present the basics of each topic, one at a time. After the basics of each topic are taught, each topic is revisited in greater depth. In this form of sequencing, the learner "spirals" through each topic, and each topic is taught until the necessary depth is reached (Reigeluth, 1992). The following sections explain the functioning of spiral sequencing and topical sequencing within PATHS. Figure 6 synthesizes the findings.

Type of Curriculum Sequencing	Guideline of Sequencing Strategies
Spiral Sequencing	**Basic-to-complex continuum** **Hierarchical relationship**
Topical Sequencing	**General-to-detailed continuum** **Simplified conditions method** **Synonymous relationship** **Antonymous relationship**

Fig. 6. Macro-Level Sequencing.

5.1.2. Spiral curriculum

Before discussing this section, there are two important continua which need to be addressed: simple-to-complex continuum and general-to-detailed continuum. These two continua have been regarded as important components to the success of instructional sequencing. "The simple-to-complex continuum refers primarily to a continuum formed by adding or removing parts of ideas (either principle or procedures)." (Reigeluth, 1983, p. 346) "The general-to-detailed continuum refers primarily to a continuum formed by subdividing ideas (either concepts or procedures) or by lumping ideas (subordinate concepts or subordinate procedures) together. General has breadth and inclusiveness (i.e., lots of things lumped together, whereas detailed usually narrow (subdivision)" (Reigeluth, 1983, p. 344).

In the flowchart, it shows that the lesson sequence is a combination of both spiral and topical patterns of sequencing. The spiral sequencing in the flowchart is consistent with the simple-to-complex continuum. Here "simple" denotes in PATHS the so-called "basic" or "primary" feelings, such as: happiness, sadness, anger, fear, and so on. These emotions are the basis from which human beings develop other kinds of feelings through interaction with society. And there are more "sophisticated", "educated" feelings which are born from these basic feelings, and they are entitled "complex" feelings. So "complex" denotes here a blend, or variation, or nuance of feelings (Goleman, 1995). They are composed of more complex ingredients such as interpersonal skills and life experiences, and produce the complexity of guilty, selfishness, and so on. Therefore, the author would like to use "basic-to-complex" rather than simple-to-complex in this paper to avoid any misunderstanding.

Thus some lessons follow in spiral sequence, which means that the lessons which treat basic emotions are taught ahead of time. After these basic emotions have been taught, then those lessons treating complex emotions are taught. In other words, an understanding of basic emotions is treated as a prerequisite for learning about complex emotions, and it is assumed that basic emotions are the ones that complex emotions are based upon. Therefore, we may conclude that a hierarchical relationship exists here. Such basic-to-complex, hierarchical relationships can be seen clearly in Greenberg and associates' division of the fifty-six lessons in the Feelings and Relationships Unit into 4 levels of complexity (PATHS, 1994, v.1, p.xxiii-xxiiiiv). They are:

Level 1: basic and intermediate emotions (lessons 1-21)
Level 2: moderately advanced emotions (lessons 24-33)
Level 3: observations and manners of emotions (lessons 35-47)
Level 4: advanced emotions (lessons 48-54)

These 4 levels of complexity demarcate the advancement of spiral sequencing, which proceeds through topics from level 1 to 4. This unique spiral sequencing is consistent with the developmental stages of children (Greenberg & Kusché, 1993). The notions behind the framework of development is concerned with the learner as naive, possibly young, and subject to emotional, physical, and social maturation during the time of instruction.

5.1.3. Topical sequencing

Topical sequencing in the Feelings and Relationships Unit is consistent with the general-to-detailed continuum in that general feelings. For example, Lesson 3: Feeling, is broader and thus taught first, while more detailed feeling, Lesson 4: Happy, Sad and Private is taught later. A lesson of a feeling in general may be adjacent by a lesson (or lessons) of same feeling in another but different "depth." For example, lessons 35-36 teach "observing emotional clues." Lesson 35 focuses on "observing other people's emotions", but lesson 8 concerns ones' own emotions.

In topical sequencing, "intensity" of feeling links many lessons; for example, lessons 14-15 teach "fear" with an increase in intensity from "scared" to "afraid", "uneasy" to "terrified." Thus, they are sequenced according to the Simplifying Conditions Method. The Simplifying Conditions Method builds from the simplest version instead of summarizing a topic each time (Reigeluth, in press). For example, under the topic "anger" (Lessons 7-12), each lesson contains a pure and focused dimension of the topic. Lesson 11 covers only "control of anger" and does not include other dimension, such as definitions of words related to the emotion.

Synonymous feelings are often taught together. This allows the learners a variety of expressions for the same, or similar, or synonymous feelings. This is necessary for empathetic communication of sharing feelings. The synonymous relationship occurs within one lesson or in consecutive lessons. For example, "mad" and "angry," treated as synonymous terms, are dealt with in two parts of Lesson 7.

In the macro-level of curriculum of the Feelings and Relationships Unit, feelings of antonymous relationships often are taught within one lesson or in consecutive lessons. One example is: in lesson 2, the feeling "happy" is taught, and the feeling "sad" is taught as well. Such sequencing allows the learner the opportunity, through "contrast" and "comparison" to understanding tacitly the difference between and among "feelings". This will imply a reference for learners to refer to later in life as to what "feeling' is appropriate in a given situation. This "antonymous" relationship becomes a unique characteristic in emotional literacy.

5. 2. Factors Affecting Macro-Level Sequencing

5.2.1. Spiral curriculum

As noted earlier, emotional development is restricted by developmental maturation; therefore it is not ideal to teach emotional literacy in a strict or pure sense with either spiral or topical sequencing patterns. As the flowchart shows, due to the level of developmental maturation on different stages of emotional maturation, spiral sequencing should move to a certain degree of complexity, pause, and then move on to a certain degree of detail. Therefore, the basic-to-complex continuum becomes a guiding principle in sequencing. And hierarchical sequencing become necessary when it is believed that some type of emotion should be dealt with as a prerequisite to the treatment of some other type of emotion.

5.2.2. Topical sequencing

Four guidelines are apparent in topical sequencing: a general-to-specific continuum, the Simplifying Conditions Method, synonymous sequencing, and antonymous sequencing. The nature of "intensity" in emotions and the four components of the ABCD model (affective, behavior, cognitive and dynamic) make feelings multiple-dimensional for learning. It is this implicit complexity that calls for the Simplifying Conditions Method, which calls for sequencing that builds from the simplest version, instead of summarization of a topic each time. For example, under the topic "anger" (lessons 7-12), each lesson contains a pure and focussed dimension of the topic. Another example is that lesson 11 covers only "control of anger" and does not include other dimensions, such as definitions of words related to the emotion.

Research maintains that children should learn how to express the same state or feeling with different words (Greenberg & Kusché, 1993). Maybe it is this fact about emotional learning that provides the motivation for PATHS's synonymous sequencing.

It is interesting that emotions are often contrasted along dichotomies; i.e., comfortable-uncomfortable, pleasant-unpleasant, and so forth. The reliance on dichotomies brings about a reliance on antonymous sequencing.

6. Synthesis

The findings of above analysis of sequencing in terms of micro-level lesson and macro-level curriculum in PATHS have brought out several of the principles that guide the sequencing of emotional literacy in PATHS. Figures 4 and 6 are concise syntheses of the patterns and factors influencing the instructional sequencing in PATHS. We can see that this unique curriculum draws on several sequencing strategies beyond those are used in psychomotor and cognitive learning. These unique strategies may be regarded as reflections of special factors that should be considered when emotional literacy lessons are being sequenced. Their appearance here suggests that it will not be appropriate, in curriculum design for affective learning, to simply reuse the sequencing principles proper to procedural and cognitive learning. Further guidance from research and practice should be sought in order to obtain a more comprehensive set of guidelines for emotional development education. Accordingly, instructional designers engaging in creating instructional sequencing appropriate to an emotional literacy curriculum's specific demands might wish to draw on the guidelines elaborated here.

7. Conclusion

The purpose of this paper is to provide guidance for emotional literacy learning by analyzing and synthesizing principles in the PATHS curriculum. After an introductory discussion of the concept of "sequencing" as it applies to curriculum development, it proceeds to a more detailed discussion of sequencing strategies in the affective learning domain. Then, using the PATHS program as exemplary case for analysis, it derives a set of guidelines for emotional literacy curriculum sequencing strategies, and explores their further implications for the design and development of the emotional literacy curriculum. Although the above research has dealt with only one dimension of affective learning, that of emotional development, the results also begin to illuminate the unique complexity and potential for further development of the topic of sequencing in affective learning. Affective learning is indeed a fuzzy subject, and has not yet received a clear and fully satisfactory definition. However, it is to be hoped that this author's efforts and tentative conclusions will cast sufficient light for the beginning of an extended process of disclosure concerning the issues involved with the sequencing of affective learning.

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Vol. 2: Feelings and Relationships Unit

Vol. 3: Feelings and Relationships Unit

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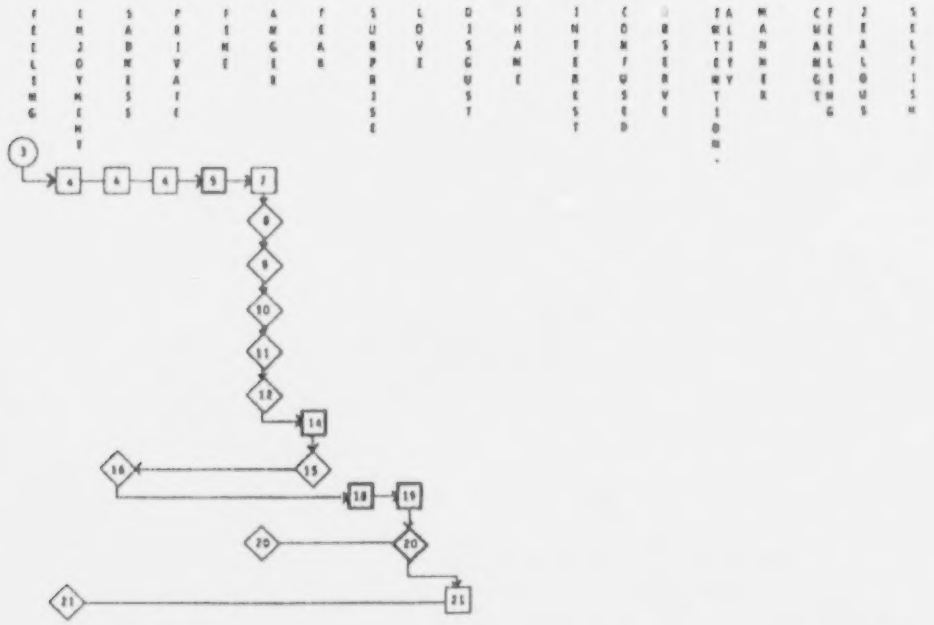

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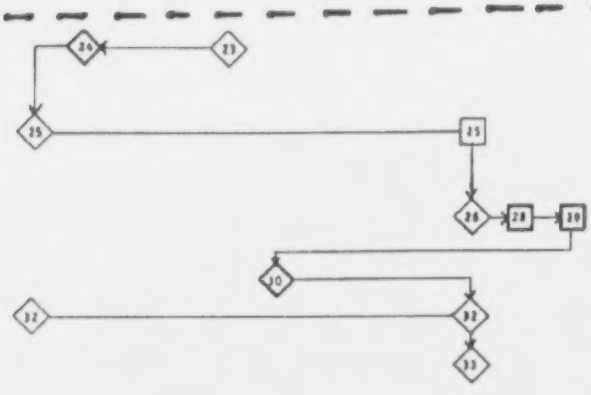

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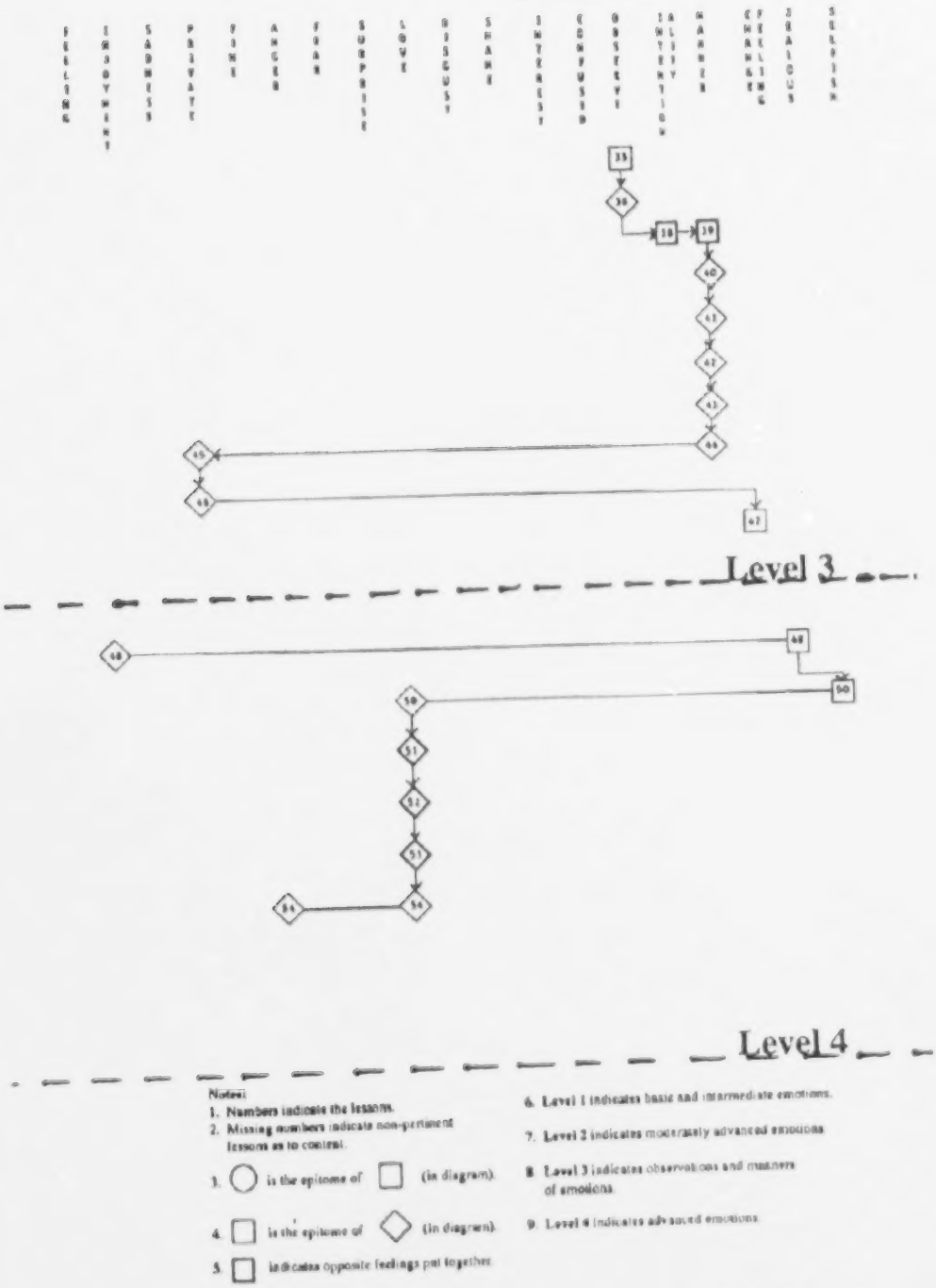
Level 3
Level 4
Notes:
1. Numbers indicate the lessons.
2. Missing numbers indicate non-pertinent lessons as to content.
3. is the epitome of (in diagram).
4. is the epitome of (in diagram).
5. indicates opposite feelings put together.
6. Level 1 indicates basic and intermediate emotions.
7. Level 2 indicates moderately advanced emotions.
8. Level 3 indicates observations and manners of emotions.
9. Level 4 indicates advanced emotions.

Fig. 7. Flowchart of lesson ordering in feelings and relationship units

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